	Q127 Based on your understanding and experiences, please share any suggestions that you have for improving scientific integrity at EPA.
1	requiring in-depth integrity training and reporting guidelines (with a contact FAQ sheet) for all new employees with a refresher every year.
2	ALL EMPLOYEES AT ALL LEVELS MUST BE HONEST IN THEIR PERSPECTIVES AND MUST ADMIT THAT POLITICS AND SHORT-SIGHTED MANAGERS CREATE DELAYS AND CHANGE DECISIONS BASED ONLY ON THE OUTCOMES THEY WANT. ACTUAL REAL-WORLD ISSUES ARE GLOSSED OVER BY EPA MANAGERS AT ALL LEVELS AND IN ALL OFFICES.
3	There needs to be far more transparency in how the SIP is even monitoring adherence to Scientific Integrity. It's fairly well-known that the SIP is weak and subject to Senior Leadership control.
4	N/A
5	Reduce the power of political appointees since some may come from the very industries we regulate
6	See above.
7	None now since we have a new administration
8	Improve clarity in how policy differs from science and where the two cross through Agency-wide training and perform preventative, systematic, and periodic reviews through surveys and other media tools to avoid breaches in scientific integrity before it happens.
9	allow staff to be on calls with upper management without retaliation

10

We need more staff and more funding and less administrative burden.

11

Improve skills of science staff in their ability to craft documents summarizing and distilling complex scientific information. Currently, there is a reliance on contractors to prepare this information.

12 Expert matter opinion should count and be respected for consistent outcome of the science. Decision making based on science will stand the test of time. Otherwise policy will continue to shift based on politics and not science and hard evidence.

13 Hire more competent QA officers

14 continued recognition and support for scientific integrity

15 No suggestions to provide

16 Find tangible ways to show that scientific integrity is still at the heart of our work, even in the face of adversarial administrations and political appointees. Demonstrate--even if it's through slogans or whatever--that scientific integrity (sound science, peer-reviewed science, policy-relevant science) is foundational throughout EPA and not just within (b) (6).

17 There need to be consequences for political appointees and for career mgmt who violate scientific integrity. Your policies need teeth. Our mission is to protect the environment and human health. It is not our mission to protect industry - that is part of the partisan political process.

18 staff the SI group with managers who haven't violated SI principles

19 None.

20 The "climate crisis" is a major driver of EPA's agenda. EPA needs to encourage opposing views, and not make decisions as though the "crisis" is "settled science."

21 Less Politics

22 This survey is starting to get a little long.

23 Industry and political appointees are the biggest deterrents to science-based policy, which often conflicts with the actual science.

24

An interactive training, not just talking heads. Have complex choices that reflect real-world situations. Preference would be live trainings rather than online or annual trainings. Though these trainings should be every year. Discuss solutions to these things, such as refusing to sign a document in which you feel unduly influence was applied.

25 na

26 Pollical appointees with little scientific background are a key problem, but then that trickles down to upper management, middle management, and supervisors who fear them.

27 Important that political appointees understand the role of SI at the Agency within the first 60 days. Also, new career senior leaders and SES candidates, and Title 42 appointees.

28 Officially recognizing environmental certifications and incorporating them into professional standard of care required by rules and regulations as approrpriate.

[29] hold technical reviewers accountable for insufficient reviews, more training and guidance for researchers on authorship

[30] Scientific integrity is not the issue at EPA. The problem has been a lack of integrity of its political appointees.

[31] None

[32] Do not hold back scientific studies do to political climate. Approve studies that meet all QAQC requirements and other peer review processes in a timely matter so they can be used for decision making especially when it effects public health.

[33] I do not have anything useful to add.

[34] Political leadership has a disproportionate impact on real or perceived risks to scientists engaged in the scientific process. Perhaps standard training for incoming political appointees, with an enforceable commitment, with public release of investigations, analysis, and conclusions could help improve things and ensure greater consistency across administrations.

[35]

Get industry stakeholders out of the decision making based on science.

[36] Authorship - (b) (5)

[redacted]

(b) (6), (b) (5)

37 I feel I am still learning and do not have the expertise to provide any suggestions at this time.

38 As I mentioned before on this survey, scientific training specific for lawyers. Not only will understanding the science make (b) (6) [redacted] I need to be able to communicate it effectively and confidently to, e.g., (b) (6) [redacted] or otehr outside parties.

39 Need training on appropriate versus non appropriate policy & scientific integrity

40 It should be an independent office, like the OIG, maybe as a division within OIG. Establishing independence from the Agency is crucial.

41 My position still stands that a law or regulation should be enacted, that the Administrator themselves cannot bypass, that requires absolute scientific integrity. Science and the scientific principle is the basis for operation at the EPA and should never be diluted, obscured, or dismissed.

42 keep politics away from science - similar to church vs state

43 None

44 Eliminate LEAN/ELMS.

45 Gatekeeping of products by career employees is an issue in (b) (6) [redacted].

46 Providing more forums to discuss issues. Inviting scientists from other federal agencies to discuss their experience in this area.

47 Improve the consistency/continuity of intramural research funding, incentivize the quality of research products instead of just quantity, work with researchers to revise internal policies governing intramural research to be more relevant to research, promote (a lot) of accomplished scientists into management (line and senior level) to foster meaningful connections between leaders and researchers, incentivize the transparency of research methods (i.e., publication of detailed methods documents so EPA research can be repeated/assessed by outside investigators), improve processes for EPA researchers to interact/share data with the public.

48 Develop procedures that will prevent political influences on science.

49 Keep the politicians and political appointees out of the decision making process.

50 leave politics out of it.

51 We need guidance on internal reviews so that they are consistent, predictable, and timely. (b) (6) does a good job but my work products with other offices, especially (b) (6), have been effectively tossed in the trash with NO feedback about why.

52 I think there should be a staff-controlled ability to initiate simple memo peer reviews not tied to program office funding/approval. Approval and funding should be masked from career managers and political decision makers initially to avoid meddling. This could still be reported and shared from fiscal year to fiscal year, but only after the review was proceeding. I also think that a continuing problem in the agency is the blurred line between uncertainty and variability or between science and policy. Where these come together political appointees and the career managers reporting to them will continue to be under pressure to cross those lines to achieve results consistent with policy viewpoints, and I'm not sure I have suggestions for solving this problem other than a recommendation that where staff believe this has occurred, issues can almost always be resolved if there is a direct meeting to discuss the issue with the staff. This can be challenging given how busy political appointees and senior managers typically are, but that doesn't make it any less important, and I have viewed even some of the largest disagreements resolved after a thorough discussion with all concerned parties.

53 The role and importance of scientific integrity starts from the top down. Perhaps an act of Congress and the President is needed immediately to ensure that politics and management retaliation/biases do not continue to influence EPA's scientific integrity in the future.

54 make clear what the integrity policy is, and that violation by senior managers and political appointees will result in consquences.

55 Clearly define what is science and integrity vs. administrative/documentation work. Encourage managers to separate the spirit/idea of scientific integrity from written guidelines. [redacted] needs to recognize when something is labeled as integrity or QA, but is not serving that function and potentially harming actual integrity. Staff are not opposed to real, scientific QA. Separate actual scientific work from communication/appeasement work. [redacted].

56 I think the number one priority for increased scientific integrity is using the anonymous, knowledgeable career civil servants that can almost run the agency themselves to have a way to hold the few and powerful political appointees responsible for misconduct. We need to institutionalize a mechanism so the EPA leaders of the past four years would have been held in contempt by career civil servants without fear of retaliation. Such a mechanism should be designed in a way so that if a president or Administrator tried to mess with its institutional design, it would be a very public tampering, and would therefore come at at least a political and potentially a legal cost. I believe if career civil servants were more protected, they could have stopped the scientific integrity violations of the past 4 years. I hope the Biden administration designs an institutional mechanism so that no matter who is in charge, legitimate breaches of scientific integrity will have consequences, no matter who performs them, including the Administrator.

57 N/A

58 SI and ethics rules need teeth and enforcement.

[59] More accountability for managers (at every level) to address integrity issues with definite timelines/deadlines for resolving such issues. Too much of the process is open ended with no real consequences if issues aren't resolved.

[60] The problems in recent years have been primarily at the political level, which makes them hard to correct. Improved accountability systems will help, but in the end, improvements require ethics and integrity at the top.

[61] N/A

[62] Making sure that outside private contractors are held to these scientific integrity principles.

[63] Career managers and leaders need to be thoroughly train and need to care about it. I don't know how you can force them to care. Some of the same people who we are supposed to turn to when there is a scientific integrity problem, are part of the problem.

[64] Communication on how bad actors (e.g., (b) (6)) will be handled in the future.

[65] Eliminate or reduce the possibility of political appointees or career employees who have a conflict of interest from holding positions that influence policy.

66

As stated on the previous page, promote and ensure that each EPA Region, National Program Office, and [redacted] has a non-supervisory/non-management scientific integrity program contact for staff to have an option to go to for advice or to make an allegation, as an alternative to only the Scientific Integrity Committee members, who are primarily management personnel. Also, add the contacts to the table(s) of the Scientific Integrity Committee members.

67 N/A

68 I believe that increased transparency of our policies and decision-making to the public will not allow for greater accountability.

69 require employees to document their methodology and data sources as a routine matter - including in briefings. PowerPoint does not allow footnotes! Ridiculous. Virtually any quantification needs to clearly state what it is based on. This isn't routine practice in my office, and hasn't been during the [redacted] I've worked here.

70

More discussions at a program level should be encouraged. Training is given at a agency or regional level and it is often hard for individual staff scientists to know how that training applies to their work.

71 We need not only to believe that we have scientific integrity, but to see that this stated goal is not just being given lip service by management. We need to see someone on a stage--real or virtual--receiving an award for rooting out any lapses in integrity. Those awards could be either for Agency personnel or external individuals or organizations. Anyone who is able to keep us on the right path. If we all saw this happening, I think there would be more participation. The limiting factor might be our wider government family and the way whistleblowers seem to be vilified, not glorified.

72 See answers to previous question.

73

When we get back to the office have the people in charge of Scientific Integrity have a few get togethers with coffee and doughnuts - and then give us a card with a few basic directions, where more information is, and whom do we talk to with any questions.

[74] This survey attempts to isolate particular variables that may affect scientific integrity. Any effort to improve scientific integrity at EPA, however, will have to examine things such as agency culture, norms, and sociology if there is to be any real result. Science is a method and a tool that provides a way to inform our decisions and evaluations; at issue is when, where, and how we at EPA use that tool. Simply setting up a collection of scientific integrity rules, regulations, and guidance that gets ignored, unevenly applied, or misapplied merely perpetuates the "same thing, different day" cynicism among Staff. The finest analysis is worthless if management's lack of political courage obfuscates and prevents its use.

[75] More training and support from management at all levels and all political appointees.

[76] N/A

[77] Please find a way to hold senior political leadership accountable for lapses in scientific integrity

[78] Better respect for the role of science in decision-making and for inclusion of scientifically-qualified staff in the process.

79 The pretense that EPA science is not applied science must be dropped. The factors used to make decisions should be in as plain english as possible. Is it most vulnerable population, measurement limitations, technology capability? Is cost a factor or is it not permitted by statute to be one? External information or feedback should be vetted and made available as much as possible to the public. There are questions to be answered that will have degrees of uncertainty. There is professional judgement and the application of what is already know as further investigation is ongoing. Spend at least half the effort presenting the science to elected representatives and the public as is spent developing it.

80 No suggestions.

81 Although (b) (6) [redacted] All of my past employers required and provided more policies, procedures and training than what I have seen at the EPA.

82 The (b) (6) AA should definitely state that the era of "(b) (6), (b) (5) [redacted]".

83 I have seen disclaimers utilized by staff, for some this type of disclaimer is supported and they can discuss their experience and have scientific discussions. For others, even with a disclaimer, they are not allowed to speak to their experience. This seems to be a fear based response and lack of trust issue with managers and staff.

84 Need to engage others outside of EPA in a collegial manner. We need to listen to all sides to better hone our abilities. Honest, open discussion can be challenging, but also rewarding.

85

Make the Scientific Integrity Official someone the entire staff votes for.

86 None

87

Need upper management committed to scientific integrity and willing to take heat for it. Policies and guidance are good, but insufficient.

88 training but also hiring advanced degree scientist

89 There have to be consequences for violating the policy or it is a paper tiger and people will ignore it. Repeat violators will be emboldened when they face no repercussions for their behavior.

90

Refresher training on scientific integrity is a must. I came into the Agency in (b) (6) and have never had SI training, and I can't be the only one. (b) (5) [redacted]

91 We need a scientific integrity law!

92 N/A

93 none now

94 Improve the hiring practices and career development opportunities of scientists at EPA. The Agency is doing very little to recruit and retain good scientists.

95 Unless staff see that issues get resolved very few people will issues forward that are not egregious.

96 Find a way to keep the same level of scientific integrity with changes in administrations.

97 N/A

98 Provide training to all EPA personnel

99 Clear guidance, rules, and repercussions for the revolving door of political appointees in decision-making roles

100 Provide your staff with the resources needed / required to properly accomplish their jobs. Open lines of communication among all EPA, no silos. Encourage peer reviews and difference of opinion expressions as part of the analysis. Create standard documents / procedures that offer transparency in decision making at all levels (from branch to upper management).

101 I have seen no evidence that scientific integrity violations by political appointees will have consequences

102 None

103 Hire experts and highly trained scientists and then trust them to do what they've already been trained to do. Hire managers that care about the science, not just getting a pay raise and cushy pension.

104 See earlier comment about regular communications from Scientific Integrity Office regarding actual cases, to supply concrete examples of what to look out for, and how to handle it.

105 I think that if a seminar or mandatory course was design with role playing of Real Life Scientific Integrity situation would be more effective than a lecture.

106 N/A

107 No Comments

108 None att this time

109 Political appointees need to care about Scientific Integrity and note a difference between science and policy (which may be influenced by economics, politics, special interests, separate from what the science says).

110 Along with trying to minimize political interference, staff also do need to recognize that the Agency will sometimes make policy determinations that are not 100% driven by science too. Or that the Agency may not always side with a community view. It's a balance, and tough decisions are rarely win-win. People learn this through experience, but it could have a stronger role in new employee mentoring and orientation.

111 Managers should be trained to encourage the collection, generation, and sharing of data with the public without concern for consequences.

112 Outreach resonates with people much more than pre-recorded trainings or documents. Creating a culture of integrity through direct communication from leaders and by demonstrating accountability when integrity principles are deliberately broken will be the most powerful ways to make improvements.

113 If the President and whomever he/she appoints as our Administrator, don't work together, EPA's mission is totally compromised. There can be an understandable disagreement in policy/process, but scientific evidence and it's open challenges should me made aware to the general public. This way, I believe, the public will be on the side of a better environment for people to live in.

114 Continued TRAINING.

115 Perhaps have more objective criteria for how science, and its associated uncertainties, is described, characterized in policy documents so there is more integrity in how it is used and interpreted to provide support for preferred policy goals.

116 Issues raised to the Science Integrity office must be responded to in a timely manner. Not responding in any way for weeks on end after multiple contact attempts with the Science Integrity Official, which is my experience, suggests that the Science Integrity Office just does not care.

117 Scientific integrity is only as solid as the people conducting the work. The policy should consider the situation where political appointees may not be interested in science based decisions. In addition, career leaders need tools to protect staff and work products from inappropriate political influence.

118 Have staff vote on who to be the Regional Scientific Integrity representative.

119 No suggestions to share.

120 Mainly, prevent Republican political appointees and industry insiders from interfering with our scientific research and its findings. Keep politics out of science!

121 I have littel faith that this issue will be handled with the ethical rigor needed.

122 No comment at this time. I am currently assessing how changes can be permanent in our daily professional activities.

123 Make clear to Management that different opinions are OK. Make clear to Management that hands-on researchers often understand the topic they are working on, better than Management. By the way, this was an excellent survey!

124

Leadership should promote a culture of listening to and engaging with scientists. It is good to question why things are done and increase understanding of the issues but not good to question the expertise and commitment of staff to producing scientifically defensible products.

125 NA

126 From my perspective & working group, SI has been first class & does not need improvement.

127 Non-regulatory science documents, such as (b) (6) [redacted] hould not be required to undergo OMB review. Doing so will politicize the science and result in delaying the public release of information.

128 There is a clear growing lack of support for animal toxicology research and clear favoritism for non-animal approaches (although zebrafish seem oddly to be included in "non-animal" approaches). This is quickly leading to the generation of data that is of limited quality and accuracy for informing Agency decisions. A suggestion would be at least equitable distribution of resources (research funds and FTEs) across labs that utilize non-animal and animal-based approaches.

129 While the policy is sound, it has no teeth. (b) (5) [redacted] (b) (6) [redacted] however there is nothing to stop the behavior from happening since the scientific integrity policy contains no mechanism for forcing the behavior to stop or punishing managers who disobey it.

130 To improve the discussion of EPA's scientific integrity or to accurately represent EPA's scientific integrity look at all of EPA's work products. This agency on a day-to-day basis produces a high quality work product - permits, inspections, enforcement actions, standards development, clean-ups, etc. Quit focusing on a few hot-button issues political parties hold near and dear to attack the scientific integrity of EPA's career employees!

131 NONE

132 All EPA staff and management need to take the training on a regular basis. THis is a Science Organization and everyone is involved at some level. Science should not be influenced by politics.

133 Two words come to mind, transparency and accountability.

134 More basic science education for non-technical staff and political appointees

135 1. Hire senior career leaders and managers that are scientists instead of just administrators and policy experts. 2. Investigate the problems with career leaders and don't just assume problems are the fault of recent political appointees. 3. Require that senior scientific advisors be included in the immediate office of each AA-ship and for each program director. There are too many levels of middle management that water down information. Replace middle management with senior scientific advisors.

136 Strong definition of science vs policy vs preference vs tradition so that the role of science in informing policy is not misconstrued.

137 (b) (5) [redacted]

138

I think commitment to values starts at the top of an organization. I am very pleased to see the new administration is committed to SI as a core EPA value. Senior leadership demonstrating that commitment to SI on a daily basis is the best things that can be done for the organization.

139 N/A

140 The actions of the Trump Administration (and career officials who cooperated) have had lasting impacts on morale, transparency, trust and communication of science. A multi-pronged approach is needed to rebuild trust.

141 No basis to judge

142 We need to improve the culture of publication and reporting of scientific data and results and studies. We don't have that in our region.

143 Make clear that scientific integrity at EPA is not just about the integrity of the scientific work that is done, but the integrity of science done outside EPA but used to inform EPA decisions (e.g. comments on a rulemaking or guidance; integrity must be considered before it is used to inform EAP decisions), and the integrity of the process of using science to inform decision-making /

144 Until there is a way to enforce adherence to the scientific integrity policy by political appointees, scientific integrity at the Agency level will depend on the good will and integrity of the appointees and the administration they serve. This seems to be necessary but unachievable for ensuring long-term scientific integrity in the Federal government. One of the most important things to put into the scientific integrity policy is the requirement for direction/decisions in writing - by the official providing direction or making decisions. Staff should be empowered to request the written direction or decision on any action and the name of directing/deciding official. Far too often in the previous administration, (b) (5) [redacted] The recordless direction/decision in the scientific arena allows for enhanced abuse of scientific integrity. Add to the scientific integrity policy limitations on when established policies and procedures (and staff/managers) used for obtaining scientific input by decision-makers can be bypassed. (b) (5), (b) (6), (b) (7)(A) [redacted] Provide additional emphasis in scientific integrity on the preparation of communication materials accurately reflecting the science or science product, and provide scientists an avenue to challenge incorrect or inappropriate communications about their science. Work to build trust between staff and senior management that scientists will be protected from both overt and subtle retaliation for raising scientific integrity concerns. Develop a mechanism for DSOs for scientists in one EPA organization, with appropriate relevant knowledge and experience, to comment on decisions in another when it appears that the best or most appropriate science is not being applied.

145 make sure independence is preserved

146 I think a lot of the lapses or near lapses that I've witnessed come from a lack of understanding of scientific integrity principles and EPA's policy and from deadline pressure and lack of sufficient resources. We also have political influence, which I think will always be a factor in our work, given that EPA's actions often result in greater costs for industry. Addressing these and providing staff with supplemental training on navigating the political minefields associated with (b) (6) [redacted] will go a long way to addressing scientific integrity issues.

147 Change the policy -- only peers approve managers are only made aware of products. This will eliminate abuses of power by managers. Managers greatly slow down products. Staff fear even getting started on writing an article. If a manager likes you the most horrible of products will be approved. [redacted]. Manager likes and dislikes of their employee have a significant impact whether a product is approved

148 It will be beneficial to have cross-division/office meeting to review and finalize the internal science approach/policy.

149 I feel that most research staff know about SI, and 99.999% of the time, the EPA functions well, and within those guidelines/policy. However, when issues do arise we typically have zero first or second-hand experience with them. I would suggest that we somehow find a way publicize some examples, perhaps after a few years of latency so that everyone knows that thee is a system, it is applied for these types of situations, and it does in fact work.

150 More Openness

151 1) Accountability is needed. 2) The need by the Sci Integrity office to confront the elephant in the room - EPA is a regulatory agency and so, decisions are not just science decisions; every environmental decision is the result of both science and policy/politics. This is what I have been told over (b) (6). As a result, I think there is a great deal of cynicism about whether we can achieve decision-making that is based 100% on science.

152 I have experienced and extremely high level of scientific integrity from career staff and management. The lapses seem to come from politically appointed officials. With that in mind, something should be established to correct that.

153 None

154 As I've probably made clear from my previous responses, I think the greatest influence on scientific integrity is the tone at the top of the agency. If there isn't a culture of scientific integrity all the way through EPA's structure, then it won't work. Everyone has to be held accountable for supporting scientific integrity. Perhaps one thing that would help to achieve that is to make sure that everyone in the agency understand the specifics of what scientific integrity means.

155 n/a

156 When it is not required - When senior managers can disregard scientific integrity policy when they feel like it or when it doesn't agree with what they want to do it makes the having a policy meaningless. There is currently no accountability so why follow? As long as there no real negative effect from ignoring the policy when it is inconvenient there will be no change. The words are nice but past and current experience shows that they are just words and have little real effect.

157 Upper managers need better understanding of scientific implementation and implications in regulatory and other programs. Especially political appointees and should be help accountable for scientific integrity and held so in public eye to all the public outside of government.

158 N/A

159 political appointees need to be held to the same conflict of interest requirements as career EPA staff Pressure from political appointees needs to be something that can be resisted as necessary, rather than something that must be implemented immediately.

160 It has to come from the top-down through management - by providing an example and by taking action when issues are raised to management.

161 As long as our country allows industry to influence policy, science will never be the basis for any decision.

162 Make sure the website is always functional and up-to-date

[163] Separate science needs from regulatory. The concern is that science could be a head of regulatory standard development. As such, needs to create a leaning process to expedite the development of regulatory standards.

[164] None. Insufficient personal experience.

[165] None

[166] Staff and managers need to know what constitutes a violation of scientific integrity. We need to see examples of when EPA follows the correct process for reviewing scientific data, making decisions and sharing that information. We also need to review hypothetical and real life examples of when EPA has violated scientific integrity whether the impact is minor or significant. I think the public has lost trust in EPA and the federal government. The CDC's sudden reversal of mask wearing policies for vaccinated people on May 19 has undermined my belief and trust in the federal government and scientific integrity and I'm an (b) (6) .

[167] freedom of the press is what protects scientific integrity - lol

[168] Hold people accountable for violations.

[169] There must be clear and repeated language from the top about the value of fact, discussion, debate, consensus, and transparency.

[170] Debate of scientific issues is a normal part of a scientists work and should be and integral component of the discussion within project work groups.

[171] Must hold Branch Chiefs and Managers accountable in lieu quickly resolving the concern so it can go away.

172 .

173

Include in onboarding for new employees and have annual mandatory training. It needs to be part of the Agency culture and the way we do business, not dependent upon administration changes.

174 include social sciences in the discussions. Be more rigorous in our decision-making.

175 Better maintenance of administrative records. A clear review policy and process. Potentially software to aid in the review process for tracking comments and responses. Clear guidance for what level of review is appropriate and any regular exceptions or deviations from the typical supervisory review, internal review, external, and independent peer review.

176 Like many issues in our profession, the culture has to adapt. As long as resources are provided to keep scientific integrity in the forefront of everything, then the culture should change.

177 The Sci. Integ. office needs to engage more and not wait until problems are brought to them. Accountability would do more than anything else. Your efforts are seen as not serious.

178

We have made an incredible progress in implementing the Scientific Integrity Policy within EPA despite political interference in 2019-2920. I recommend we continue our efforts without political interference.

179 if i raise the issue with my suppression of science and my management gets in trouble they will know who ratted them out, me. who else would raise the issue? there will be retribution on me.

180 Accountability at the highest level of government must be enforced, perhaps by (b) (6).

181 It's critical that we communicate science to the public clearly and compellingly, and in their idioms. No matter how much we describe our scientific rigor and independence, it won't make a dent if our work is unintelligible or inaccessible to the public.

182 Clean house and start all over. Have there be real consequences for the managers and scientific officers who violated the policy. Without that, there can be not trust. Make sure the efforts and changes to policy are coordinated with OSTP scientific processes. Try to diminish the vast differences in how scientific integrity is handled at different agencies and within EPA, across different offices. Develop an agency wide professional development program that encourages development, provides training and resources, rewards people who progress in the program, prepare scientists to talk to the media, and make the performance reviews of managers measure whether the people they supervise have been given professional development opportunities and benefited from them. Make the promotional pathways in EPA more clear to new employees and more fair. Provide employees opportunities to interact with the media and celebrate their successes, instead of fostering this secretive, scared culture that would rather not share the science than risk a mistake. Let the EPA scientists share their science with the public who pays for it, get people excited about what they work on, and encourage young scientists that public service is a viable career option where their science will be respected.

183 Remove OMB from the (b) (6)

184 Political appointees should be given briefings on the science, even if the president doesn't agree or care about science

185 help upper management understand that science differs from policy, and that science must guide policy first
186 Don't let the dollar influence the science.
187 Being a new employee at EPA. I think every employee need the basic training of scientific integrity.
188 Training on how to discover personal bias and agenda and open the door for openness to new data and current scientific truth.
189 na
190 none
191 Look into restructuring and minimizing/excluding/firewalling off political appointee and management interference in scientific findings, recommendations, and publication.
192 let scientists openly debate scientific issues that significantly influence agency decisions without interference by upper managers
193 NA
194 I would like to see examples of how scientific integrity issues have been resolved. I think that it would increase our confidence in reaching out to the Scientific Integrity Official.
195 Political influence should not be the basis for the decision.
196 In my possibly myopic view, I don't have any negative SI experiences that need improving.

197 I have seen a much stronger focus and support for scientific integrity under the new administration and new EPA administrator. I think we are making a course correction and moving in the right direction. This survey collecting data for 2019 and 2020 is largely based on past actions and doesn't reflect the current state.

198 na

199 More training and education opportunities not on scientific integrity but on science. Encouraging scientific staff to attend research conferences in relevant fields, making courses on statistics, coding in R, and relevant science fields available as refreshers to keep employees up to date. Making it easier to get necessary and up to date software packages for analyses.

200 Over the decades, it's common that employees' feelings about an Administration's policy choices influence or inform their views on legality, morality and scientific integrity of the Administration's decisions. Polls like this and other communications on scientific integrity could take some time and discuss each and how they are different, so that discussions on scientific integrity are distinct from feelings about policy choices.

201 Improving personnel and getting more funding/resources will help reduce pressure and scientific error.

202 I have no idea.

203 Website including discussion, such as 'what would you do?' scenarios, with what actually occurred and the correct outcome. They should be wiped of PPI, as possible.

204 One problem is that when political appointees come-upper management working with them are trying to protect their career jobs. Depending on the administration, the push to do what the administration wants versus what is right for EPA's mission changes. The scientific integrity program should be strong enough to avoid the "fear" of retaliation by a changing administration. That said- political appointees are not required to take the same trainings we have to take- that is a mistake.

205 Mandate equal opportunities/time for NGOs and industry to meet with program office representatives to discuss science issues. Any changes to scientific content of a report should be reviewed by the scientist authors prior to release. Last-minute changes at the political level should not be allowed.

206 I do not have anything to add.

207 Set abundantly clear standards for what and when scientific information can be shared with Media. Provide clear guidance on how to explain personal perspective vs EPA stance.

208 assure that any large scientific decision whether it be a permit or a rule are vetted amongst all in the agency not just keep at the highest levels in washington dc offices.... we cant do out jobs that way..that just makes us feel like are hands were tied and someone else made the decision...

209 NA

210 When allegations are made, the scientific integrity office needs to follow up. (b) (5), (b) (6) [redacted]

211 N/A

212 All employees are provided training to better understand the policies and guidance dealing with scientific integrity.

213 maybe less time spent on oversight and trusting the employees /process a little more.

214 It will be interesting to see how or whether the new political appointees, once we get them below the top two, respect science under the new administration.

215 We are spending too much time on activities such as ELMs huddles with managers that care more about schedules than the science -

216 No suggestions at this time.

217 Clear guidance on distinction between science vs. policy and how to address uncertainty in decision making.

218 (b) (5) [redacted].

219 Establish policies that are maintained/adhered to despite the change in political leadership.

220 n/a

221 The term "scientific integrity" connotes plagiarism, fraud, distortion, and suppression. These are certainly all bad practices that EPA should strive to eliminate, but this framework is somewhat limited. Scientific integrity should be understood to include support for and respect of scientists and the scientific efforts being undertaken at EPA. Instead the culture too often is one of bureaucratic hoops and cudgels: did you anticipate everything that would happen in your QA plan? If not, did you stop and revise the QA plan before proceeding further? Did you meet this productivity target?

222 Studying the science and evaluating the science in policy making.

223 None

224 Scientific integrity is also influenced by funding and that should be integrated into the scientific integrity policy at EPA.

225 The earth was created by god about 6000 years ago and is not hundreds of millions of years old. Supported by science! Scientific research has to be rooted in pro-growth and pro-business mindset. EPA needs to be a partner of advancement and not a preventer of growth. Business will change, but they want to know it matters not that they are doing it because the government is forcing them. When the EPA forces manufacturing and production overseas we lose ALL control. Then the exact behavior EPA wanted to prevent just occurs outside of our borders and the pollutants enter the atmosphere anyway! Pushing for programs that don’t work (recycling) simply creates problems in other parts of the world. Look at all the plastic that is being shipped to third world countries and burned in the open air.

226 Take individual scientists' experience and suggestions into account more when decisions are made regarding efforts to give the appearance of improved integrity.

227 decrease my workload so I can pay more attention to the science part of my job as an [redacted]. Political/ policy decisions take priority, leaving little time for me to make sure the science is given proper time to be examined and look for reasons for problems.

228 Maybe a training where actual examples are given (change the names etc.). Explain how it was identified and resolved.

229 More training so that it becomes normal, like IT training.

230 Train professional with science background to take challenge in the management positions.

231 leadership's rational and consistent message.

232 Separating science and regulatory/policy making decisions and internal processes. In addition, as I mentioned previously, [redacted]

233 Share more scientific research with the public. Make EPA as transparent as possible.

234 No comment

235 knowledge of what is it the policy, how to report standards and a training class is needed

236 Please don't just look at "traditional science" and how it relates to scientific integrity. Like previously mentioned, conducting an internal survey can benefit from more scientific rigor.

237 Unsure - new employee

238 In my experience I have never come across someone from EPA not having a priority of Scientific Integrity. When you witness loss of scientific integrity from outside organizations it would be useful to know exactly how to handle it within your role as an EPA employee.

239 The scientists should be able to be free to explore science and questions free from direction from the planners. The planners make things impossible.

240 First there needs to be professional respect for all, tear down silo's which I hope the (b) (6) did. Team work among risk assessors and risk managers needs to improve, the divide continues to increase. Staff up on risk assessors and encourage discussion to bring out scientific opinions on different topics to encourage learning about the differing opinions, perhaps differing opinion occurs because of differing scientific specialties and experience.

241 N/A

242 In my experience, what is right is not always easy and what is easy is not always right. Fostering an environment where staff, supervisors, managers, and senior leaders recognize this and are willing to make difficult decisions to ensure a scientifically defensible outcome is important. Finding a way to incentivize this approach, even when it might mean accepting short-term difficulty, is important. Too often, it seems as though people seek a least-cost path to the detriment of our work.

243 the issue to me what can be done when the process is broken and if something is not a scientific integrity issue but rather a do you want this in the washington post test, why we can't say this is not the intention of the law

244 accountability and training for senior management and political appointees

245 None.

246 Thank you for taking time to conduct this survey. Scientific integrity is the cornerstone of building trust with the public at EPA. I hope that as you consider making improvements, that focus on making clearance practices more effective and more streamlined.

247 Evolve the culture at EPA where the Program Offices and Regional Offices look to (b) (6) for independent and definitive interpretation of science and technology in regulation development and implementation.

248 If we do not say/write things that we consider to be true out of fear of what others might say or how they will react, this deeply undermines scientific integrity/

249 More rank and file workers. Less lawyers. Longer court ordered deadlines. Less power by administration appointees.

250 '-Transparency about level of outside influence in scientific questions. -Context for differing scientific opinions. Climate change is not manmade is a DSO but how much weight should we give it. -How will we prevent senior career leaders from capitulating next time? Connections to congress, courts and other checks and balances.

251 I am feeling better about the new administration and scientific integrity. We just need to shake off the past four years.

252 Don't overburden your staff with dozens of all-hands (at every organizational level), dozens of mandatory training, dozens of planning meetings, and perhaps, perhaps, they would have time to report violations of agency scientific integrity. EPA doesn't appear to have a strategic plan for the management of the agency, which is a huge oversight. For example, what percentage of time should each FTE-level (e.g. entry, career GS-14, supervisory, etc.) be spent in meetings/training/core work (e.g. 20%/20%/60% for GS-14)? Set that goal, and develop the strategic plan to meet that goal. Scientific integrity is but one facet of the agency that gets under-represented because of the lack of a strategic plan for the management of the agency (or, if we they do have one it's not very good).

253 no one here talks about scientific integrity. i get the sense they know it exists as a policy but don't understand how it's applied to our daily work processes. (Again, we're not a lab filled with scientists or researchers, but we do use data and science in our daily work.)

254 I will not comment for fear of reprisal.

255 Don't have any suggestions

256 n/a

257 Don't elect any more idiots.

258 don't know who deputy of scientific integrity is in our region?

259 Frankly, it can be very difficult to try and present diametrically opposing scientific conclusions in a single product or document, particularly if other practitioners are looking to use that product as the basis for health protection or cleanup. So guidance and understanding on how differing scientific opinions can be reconciled, or at least appropriately represented, while still supporting agency activities, would be very helpful at all levels, from technical staff all the way up to senior career leadership.

260 None

261 EPA must ensure that managers/supervisors, who direct the work of scientists, are qualified to evaluate the merits of that work. The supervision of scientists can not be left to "good" managers that have a weak science background. The staff will not respect them and they typically resort to micro-management of matters that do not improve the scientific work product but do negatively impact morale. I recommend senior leaders be forced, via performance standards, to address related morale problems identified in the annual employee viewpoint surveys. If unsuccessful, within a year or two, SES managers should be moved to other jobs.

262 none

263 Limit lobbyists from being political appointees in the agency.

264 HIRE SOMEONE ELSE TO PRODUCE THESE TYPE OF SURVEYS IN THE FUTURE.

265 Better relationship with the Quality Program

266 Make sure scientists have an opportunity to hear about, and potentially comment on, policies made based upon science.

267 No comment

268 transparency during the research planning process, open dialogue between decision makers and research staff

269 this survey is too burdensome to accurately characterize the SI issues from the previous administration

270 n/a

271 Provide adequate resources to the Scientific Integrity Official and their staff.

272 (b) (6) , not a scientist, and while I (b) (6) I don't face scientific integrity in my day-to-day work so I feel others who are more involved are better-suited to answer these questions.

273 I have no suggestions at this time.

274 There has to be accountability

275 Hire and promote more scientists and engineers. There are too many managers/supervisors without any scientific credentials. There should be more paths for technical staff and less hiring and promoting of Environmental Protection Specialist who have inappropriate degrees or no college degrees.

276 (b) (5)

277 Currently, there are too many reviews of each scientific product. There needs to be only one review for Quality Assurance, one review to determine the Policy implications and one or two for scientific content.

278 More open communication from upper-mid-level managers to the rest of the EPA staff. More transparency of policy and budget decisions. Better communication of Agency priorities especially after a Presidential Administration change

279 If EPA is to carryout its responsibilities to protect human health and the environment, it is essential that EPA ensures honesty and integrity in its activities and decision making processes, so that the American public can have trust and confidence in EPA's decisions.

[280] Restoring union- management partnership such as we had back in the 199s with joint decsion making on employment condtions is critical as the vast majority of agency scientists are at the staff level. This would greatly help to elevate the status of scientists.

[281] People need a platform to express differing opinions without exposing the individuals to retaliatory behavior. Retaliatory behavior is often passive and takes the form of promotion pass overs, or marginalized roles. I have seen this occur with staff who have been highly decorated in the past but suddenly find themselves marginalized by senior leaders.

[282] The interference with scientific integrity from the top of the agency, both political and career leadership, is where this must be addressed. If career leaders believe that they must adapt their scientific opinions to fit the political leadership's ideas, then this impacts the agency rank and file.

[283] I think that we have become quite aware of scientific integrity (especially the last six months). I would like to see the FY2019 and FY2020 annual reports from the Sci Integrity office....

[284] No comment

[285] I see very little problem at the staff/line supervisor level. I think the tension increases as you go up the management chain, especially at the career manager/ political appointee interface.

[286] Find a way to create strategic investment areas in need of science and/or research for the agency and resources to focus on that goes out 5-10 years that is protected by political interference.

287 N/A

288

Having more time to develop new methodologies. Coordinating new models and methodologies so they are consistent with each other.

289 Allow the regions to be more autonomous for fear of executive branch interference

290

More mandatory trainings about scientific integrity (every 2-4 years) and BMP manual with who to contact and when to contact them.

291 N/A

292 Continuing to remind the employees what scientific integrity is supported by EPA.

293 This is a great start! Thanks for asking these important questions.

294

It seems that at this time in this country, there is a real problem with the basics of reality at all levels. Not easy to correct that problem within a single agency of the government. Training at other levels of government on this topic, especially for the large departments and agencies which are either partners in projects, or responsible parties in many cases, there is a need for them to have similar training. I am including Dept. of Defense agencies, Dept. of Interior, Dept. of Commerce, etc. They all impact EPA work on this topic. Did I forget to mention White House and Congress and Senate? Or even state agencies which work with or against EPA science?

295 I suggest presentation and discussion of actual cases of scientific integrity problems during work unit meetings as a form of training.

296

Need our advisory committees back without constraints on members

297

Scientists have been retaliated against, including decreases in their performance rating, for refusing to tolerate scientific misconduct and reporting it. LER than disperses the issue and insisting on separating retaliation/harassment/bullying/intimidation/attempted coercion and scientific misconduct from the performance review, even if these actions were taken by the person who is given the power to review the employee who had spoken out against the manager.

298 reduce emphasis on bean counting- and administrative work; add appropriate resources to mission related science and duties;

299 None

300 Make (b) (6) functions more objective; train analysists to ferret out bad data and document findings. The (b) (6) is a natural designee for this sort of objective analysis, but there must be objectivity in the evaluations. Currently, (b) (6) functions to establish tools, but not actually analyze data integrity across various functions - this is an Agency Enterprise Risk.

301 There are areas where staff reviews science submitted by the states.
(b) (5) [redacted]

302 Training for incoming political appointees including at the Regional level

303 N/A

304 N/A

305

If we lose scientists to retirement and don't have any overlap with new hires, we are wasting institutional knowledge. Shrinking the agency will jeopardize scientific integrity. We need to be funded appropriately. We need the appropriate trainings which means individuals should have access to trainings that keep them current with science in their fields.

306 THe lines between science and policy need to be defined more clearly since our work in (b) (6) [redacted] uses science to inform risk management and policy.

307 For training purposes, use stories (perhaps acted as videos) that would demonstrate to people what to expect when they reach out for either an informal consultation or formal reporting of breaches. Ethics training does this somewhat. But the point is not just to offer examples of what is reportable, but also what to really expect. Confidentiality may prevent you from using actual cases verbatim, but you can use composite of actual cases that would make them unrecognizable while realistic.

308 I have no comment at this time

309 integrity thrives in sunshine. transparency will improve scientific integrity and especially transparency / communication with the public can improve perception of EPA.

310 Please do NOT turn this into another training for staff. Improving scientific integrity needs to address the top because the problems come from the top: e.g. industry groups having too much influence in decisions, political appointees and the White House ignoring science. Those are the issues to address.

311

This program needs to infuse everything we do. Scientific Integrity cannot be an office "over there" that checks the box, the concept must become second nature to all Agency people and all managers and leadership, including political appointees, must support the policy. Here support means more than lip service. People need to feel secure in their ability to report issues and have them handled professionally and courteously without fear of retaliation. That means all the way to the Administrator, support for the process must show positively.

312 I believe the two biggest obstacles is retaliation by management and the fact that no repercussions appear to occur for those who blatantly violate

313 Create linkages between improvements in scientific integrity and environmental results in communities.

314 Stop putting communication staff in control of scientific messages and processes.

315

perhaps developing a best practices document might at least lead to a conversation on how "level playing field" warps scientific integrity and provide a vehicle for thinking about how to ameliorate its effects.

316 Better understanding among staff that we are part of the executive branch and cannot "drive" policy, unless it is a directive from political appointees and/or Congress

317 Reduction of non-scientific administrative burden on scientists can greatly improve quality and integrity of science

318 Additional whiteboard videos

319 training managers will not solve the fear of retaliation issue.

320 Direct interaction with the Scientific Integrity Official is still the most useful mode of training for senior leaders, managers and staff. Please maintain this engagement as a priority. While in-person is best, TEAMS can work great.

321 Institute policies that prevent the various methods of delaying and limiting the scope of (b) (6) research projects (including technical support projects) from startup to clearance.

322 We need to know who we can contact for confidential advice/ recommendations.

323 Bias creeps into many areas of science, but EPA should not be biased, one way or the other. Politics appear to be a real issue, with priorities and scientific findings changing depending on the party elected. This should not be, as science should not change to fit what is desired to be the outcome, but rather the science is what it is. Flip-flopping on things gives the public less trust in EPA science. All science should be encouraged to be made public. Just because there is consensus on something does not mean that it can't be questioned by others who may have different input that also has merit. These things seem to be forgotten and perhaps reminding scientists and managers on what is the scientific method and that it is not a bad thing to question things. I've always hated the term "settled science", since very little in science is actually settled. A while back (b) (6) (b) (5) Statements such as those are certain to shut down any scientific rigor or debate, which is still warranted for that particular topic, in my opinion, since there are other aspects of climate that change that are not related to CO2 and also are influenced by humans. Management should encourage scientific discourse, not make someone afraid to speak something different from the 'consensus'. Everyone has their personal opinions on things and all should keep to the facts of science and not let politics or personal opinions cloud their thinking, or the thinking of others around them.

324 None

325 Characterization of uncertainty at EPA is disorganized. There needs to be an ontology framework, tools and training to be able to articulate this gray area. This will allow any model output to be efficiently compared with empirical, validated data and therefore trusted.

326 I think many employees and perhaps the public feel like there has been a lack of transparency and a lack of scientific vigor the past few years; reinforcing EPA's commitment to this and increasing transparency around EPA's efforts to correct/improve this would go a long way. I also think that strengthening and highlighting EPA's enforcement tools and activities would greatly help.

327 In order to report a lapse, I'd have to have more confidence that it would not affect my career and that it would make a difference. It's not worth risking my career without being confident change is possible. Under the Trump administration there were many high profile cases of career employees both at EPA and throughout the federal government who stood up for the truth and were silenced, their careers destroyed, and (b) (6) got away with everything.

328 I feel the staff, for the most part, have scientific integrity but they're either coerced by management or too afraid of retaliation to report violations. There will need to be trust-building before people are comfortable reporting when their management are the problem. Prove to us that reporting is/can be anonymous. (b) (5), (b) (6) [redacted]

329 I'm not sure manager understand when scientific integrity is in question, even we the issues are brought to them. The are more interested in finding a quick resolution than understanding and appropriately addressing the problem. If there was a way to check this, without fear of retaliation.

330 Greater investment in STEM education across the country so that the public has a higher baseline of scientific understanding by which to judge the issues and candidates in advance of elections.

331 More audits need to be conducted on the all the research being performed. (b) (5) [redacted] If researchers know that they will be audited, I feel that more researchers will take the time to maintain scientific integrity. I feel that more education/training is definitely needed on scientific integrity so that there is a completed understanding of what scientific integrity is.

332 Let the science speak, not the politics.

333 I think it would be helpful to have more resources outlining best practices on scientific integrity. Also, it would be good to initiate (or re-initiate) an internal peer-review process and team that can offer support and provide constructive feedback for folks conducting scientific studies.

334 None

335

More staff to review and QA documents, better differentiation between science and policy, clear guidelines on release of pending data (raw data) vs final validated data with interpretation and context.

336 It must be based on full transparency and not on the political winds that are blowing at the time. There needs to be a critical look at the Political appointees hired an how they are applying factual scientific data. Where do they go after a political term? Are they being embedded somewhere within the agency under different appointments?

337

Stop the hierarchical approval process. List differing science opinions in a risk assessment rather than enforce multiple approvals. Senior leadership insulated themselves from decision making by delegating down. Then there is pressure which cannot be reported because your supervisor mandates things and can fire you.

338

This is a conversation that needs to recognize the diversity of EPA. Scientific integrity is a question that implicates policymakers, lawyers, and scientists and figuring out how to involve all the stakeholders is vital to ensuring that science and policy stay in their lanes.

339 No progress will be made if high level managers who are offenders of scientific integrity from the past 4 years are not identified or reprimanded. These issues are ongoing in (b) (6)

340 Grant the (b) (6) office more staff and more power to conduct and share investigations publicly about failures to implement scientific integrity, political interference, failure to make decisions based on science, retribution/reprisal from management.

341

Congress needs to reduce the number of political appointees placed in various positions across the federal government. We do not need 4-5 deputy assistant administrators--these people literally get paid big bucks to micromanage. Their interference is not welcome and these people do not actually do the work and are practically useless.

342 Policy and scientific methods are not always compatible. I wish policy-makers would be brave enough to say their policies are sometimes NOT founded on science principles

343 n/a

344 What is scientific integrity about. The use of good science to prevent or remediate environmental concerns. Allow real research on alternate non fossil fuels that EPA started in 1976, and 1978. In 1974, several universities started and made progress on on alternate non fossil fuels. All that information was buried and suppressed. You have to dig deep to find the information that was published by EPA. However, we still have climate change and (b) (5) . WE do not work for (b) (5) , but upper (b) (6) managers have them as clients. Why do we allow lawyers working for industry dictate policy for science? Why are you not reading the tea leave? I will shut up until I leave EPA, I have not choice since I am no longer considered (b) (6) .

345 Decision makers (supervisors, career, political) shouldn't use the rationale of 'not environmentally consequential' to downplay a potential agency action (i.e., where science indicates the action should be taken).

346 N/A

347 This is hard to answer as a new hire, but I have heard some stories in meetings from even upper management acknowledging that there have been problems. I would hope that scientific concerns would not be dismissed and there would not be undue influence from outside groups/industry, although it appears that may not have always been the case.

348 Why would I share suggestions that you don't really want to hear?

349

the survey needs improvement. poorly designed, WAY too much detail in the questions per page, really takes a huge time investment to carefully use each pull down menu. way too cumbersome.

350 Promote where and how the science from the Agency scientists was used to support a decision or direction, e.g. case studies, features, social media, press releases.

351

1) Hire ACTUAL scientists 2) Look at how funding is distributed and how biases of career staff impact this 3) Let scientists do the science that they have the expertise to do and also, just empower us to be in an environment that allows to actual science and not shuffle paper and respond to EVER EVOLVING CHANGES IN STRUCTURES.

352 Take fear of retaliation out of the workplace.

353 I have thought a lot about this because I have spent the last couple of years working with career (not political) managers in my management chain (b) (5) [redacted] There's an unspoken sense that if you speak up or ask too many questions, you will hurt your chances of being promoted into management roles, so many staff stay quiet. The most global fix, of course, is to make sure that individuals selected for management are honest and principled and will not buckle under pressure, but I have no suggestions for how to operationalize that. Short of that, there should be ways for staff to produce work products that go through fewer layers of review, or some work products that are able to be released publicly without management review. I have personally worked on analyses that I think the public deserves to see, (b) (5), (b) (6) [redacted]

354 There needs to be a way for career staff to be able to push back against political appointees which often put pressure on staff to do things that may not be appropriate. There is always the fear of retaliation.

355 Current review process, as such is extensive. But see if it can be simplified while meeting all the mandated requirements.

356 We should listen to the scientists regarding time and resources needed for a given research project. Even though deadlines are necessary, they should not be arbitrary or linked to personal performs measures - this is a recipe for integrity issues. Research can include enforcement case work, as samples need to be analyzed and records reviewed and interpreted before a regulatory determination can be made. Additionally, we should do a better job at the Agency in understanding the costs and resources needed for specific research/enforcement activities and find better ways to convey the impact of arbitrary budget cuts on the work product, or the activities that could not (or should not) be performed because of budget constraints. On a side note, I wish we could get rid of the political appointee positions as heads of the Agency and Regions. This creates a lot of extra unproductive work every election and shifts gears and priorities in a disruptive manner. We would be better off having the Staff at EPA vote for candidates for these positions each election year, rather than have them appointed by the White House. Just an observation.

357 n/a

358 Find the science that was blocked over the last several years and get it going again

359 Remove political influence (which is based on money) from environmental protection.

360

This survey has questions on "reporting allegations relating to a potential lapse in scientific integrity" which I read differently from something like "seek advice from 1st line supervisor or other scientific integrity leadership while there is time for course correction." What I am suggesting is that seeking advice or speaking up can redirect activities that are headed toward a potential scientific integrity lapse so that there is no allegation to report later on. If there is a way to encourage appropriate interventions in a timely matter, scientific integrity could benefit greatly. Might scientific integrity training include intervention strategies in addition to how to report potential lapses?

361 Just be transparent to the public.

362 None

363 training

364 NA

365 na

366

Hire the best engineers and scientists. Currently in (b) (6) we are required to hire new staff at the GS-7 level which is too low to attract quality scientists or engineers. In addition the emphasis is on hiring students who are usually in soft majors and not science or engineering.

367 Contractors have QA/QC staff who are normally independant review all deliverables (scientific or otherwise); there should similar processes in place within EPA for all organizations - even for those that manage/publish data.

368 n/a
369 Now that the Trump appointees are gone, the crisis is over. Relax.
370 Management needs to act with less impunity as it concerns dismissing staff's conclusions that are premised in data.
371 Continue to Research and communicate
372

disconnect between science and high-level policy/decision makers. As issues move up the chain of command, there is less understanding of the science and a greater emphasis on compromise.
373 Provide additional training and establish a hotline similarly to the IG
374 Politics seems to drive the areas of research by the agency, rather than the agency identifying and doing the research on areas that most impact the health of the environment and humans.
375 Clear direction for staff and transparency
376 Mandatory training for all employees - with special emphasis training based on roles that include political and non-scientists.
377 Create details in Human Resources to allow scientists and engineers to be involved in the screening process for applicants for technical positions.
378 Stop having management rush or create pressure to rush to
(b) (6) Have management be tolerant of scientific rejections.
379 There should be less influence by industry.
380 Decision must be supported by science and data not politics.

381 Professional intergity needs to be stressed as the foundation of scientific integrity. If managers do not exhibit intergrity in all aspects of the agency's business, how can employees expect the highest level of scientific intergrity? If you are not concerned about employee safety, how can you be viewed as caring about their opinions and findings?

382 Separate science from politics.

383 Annual national virtual conference showcasing projects that went wrong and successful projects.

384 keep politics out of science. Science is science. Stop trying to serve two masters. either we serve science and publish results as they are, or we serve our political masters and make our science fit with their agenda. You know that is wrong, so stop doing it. Even if it doesn't fit with wishes of whichever administration is in office. Publish the truth and leave politics out of it.

385 NA

386

this topic needs to have a strong presence both in everyday conduct of business, from managers and top leaders including political appointees. the question is more about how to embed scientific integrity in EPA processes so that it becomes second nature and part of the culture

387 brown bags; case studies;

388 Greater accountability on political appointees decisions, actions and influences on decision-making. This might include fines and sentencing occurring after they leave their EPA office.

389 Stop trying to blame the last Administration and just do good work and implement good policies.

390 some times it feels that decisions are made in a vacuum. Staff may be more inclined to trust leadership and the Agency's commitment to scientific integrity if we could make a clear connection between the data, the decision/policy, and the process/logic for arriving to the decision/policy.

391 Not part of my job.

392 We need to do better in explaining how science works. Policy is supposed to be on best available science. it requires expertise to make those choices. It is not always clear cut.

393 I don't think supplemental trainings will be helpful unless they are all scenario-based questions and answers. Most online trainings I have taken in the agency are extremely long and disengaging and designed for the presenters to check a box. I believe creating easy-to-use interactive resources (a webpage for employees to reference when creating a new project, a hotline to call or an inbox for email) will be much more useful for employees.

394 (b) (5) [redacted]

395 N/A - New employee.

396 See previous comments, but it must happen at a very high level. There is a conflict of interest (b) (5) [redacted] Congress must protect EPA from conflicts of interest, whether explicit or inherent in background and connections to the regulated community. No Administration should be allowed by law to put politics and business interests above EPA's Missions.

397 Simultaneous review of products. In the past the sequential review of papers/reports (bottom up) have resulted in excessive revisions (over 40), conflicting comments/editorial suggestions, unnecessary effort, and unreasonable delays.

398 Public perception plays a role in EPA's science, even internally. The lack of information that is relayed to the public about EPA's role, responsibilities, and scientific outputs is destructive to staff.

399 NA

400 Training should include examples of the distinctions between science and policy and how we might effectively use both to make sound regulatory decisions.

401 Overhaul the entire system. Fire managers whom intimidate staff to change conclusions.

402 Training upper management to insulate the science of the Agency from their personal and professional agendas.

403 N/A

404 At the moment, I think that each researcher or agency official must integrate into one's coda of personal actions an indelible commitment to scientific integrity in their information development to assist the solution of environmental problems requiring the EPA input.

405 Internal Electronic Platform for any ongoing problems/issues

406 The Agency's mission is defined on criteria of protecting public health and the environment. Other Agency's and Departments, such as Department of Commerce and SBA carry responsibilities to the health of businesses in the regulated community. While the impact in the Agency's decisions to industry and livelihoods is important when making decisions, it is not a component of the Agency's mission and so should play an appropriate, not over-proportioned role, in the Agency's decision-making processes.

407 Closer interactions with outside governmental and academic scientists that have high widely recognized integrity

408 We need to reduce the amount of wasted time on (b) (6) , and internal technical reviews. Removes these obstacles to our productivity.

409 none

410 People shouldn't be politically appointed to a scientific agency like EPA if they have no science background (like an actual education degree), unless their job is strictly HR related or some other type of job that doesn't use science to make decisions.

411 Training to [redacted] approvers on the importance of adherence to clearance deadlines and have a LIMS system to automate lab data

412 Encourage managers to not exclude people from meetings, tell them the process for resolving scientific disputes

413 More funding for increased FTE at higher GS levels so that staff are less overwhelmed by unrealistic workloads. Alternatively, senior management should be honest about declaring there are issues we don't have capacity to address, without resorting to management fads like LEAN.

414 None

415 Every decision briefing for management should allow for open and honest discussion of differing scientific opinions, uncertainty, the value of additional information and vulnerabilities associated with different decision options.

416 There needs to be accountability and consequences at the management/leadership level for lapses of scientific integrity within their organization. Should be treated similarly to violations of HR, financial, and civil rights policies. Without consequences, there is no incentive to change.

417

EPA must address breaches of scientific integrity with uncompromising accountability that is applied consistently and transparently, otherwise the problem will remain unresolved. Retaliation happens; individuals are unlikely to report if they do not feel safe.

418 Create clear distinctions between duties of management and duties of scientists and employees, so that managers without backgrounds in the sciences do not interfere in the day to day work.

419 This is not about just scientific integrity- it's about EPA culture on and the impact of all staff from fairness in promotions, diversity, ethics, etc. Provide statistics of why some folks move up through the career ranks quickly (sorry the answer is not that they are genius). Why do some folks never move up in rank but still get good PARs ratings? What is ethic background of these groups? Is it a relative of a director? Is it a married couple. Are these folks dating up? Why after a decade of low EVA survey scores - we never got rid of the problematic senior management? EPA needs to undergo a big cultural change. Someone needs to lead that change and it's not going to come from existing management - who are part of the problem.

420 Managers and staff need to have adult conversations on science and work through issues without excessive judgement of people bringing forward information. I.e., evaluate the facts and don't denigrate the scientists that bring forth the different opinions.

421 Increased training, accountability, and more serious culture for improving scientific integrity at EPA for managers, policy decision makers, and scientists. More discussion to shine light on current inappropriate practices in general sense especially retaliation. Facilitate an easier more transparent and inclusive process for examining poor practices resulting from favoritism instead of merit. Consequences for managers who are not promoting scientific integrity within EPA.

422

Develop a policy for quickly, comprehensively releasing public health information and for responding to specific risks and then train ALL players on that policy (researchers, policy/regulation developers, attorneys, media/public affairs, enforcement staff, etc.). Develop a policy for how to explain portions of decisions/actions that relate to science and those that relate to policy and then train ALL players on it.

423 N/A

424 make decisions based on science, not political administrations

425

When you make a report to the SIO it's extremely slow to get a reply. It often takes 3-6 months to get very preliminary feedback that's not specific. This is especially important because in HR we are waiting on this to take action and a manager may believe SI violation has occurred but an employee denies it and we are in limbo for 6 months waiting on the SIO. Then we get something that's very vague and not decisive on whether a violation has occurred.

426 Having multiple senior science advisors --- go beyond human health expertise -- both toxicology and exposure. Look for system's thinkers. Look for ecological expertise. Look for folks that understand and can resolve scientific differences. Look to rotate senior science advisors at the Office and Division levels to limit the bias that any one senior science advisor may provide. In (b) (6), we tend to have "science advisors for life" and it has been my experience that they do not act as facilitators and mentors. Have subcommittees that involve staff in addition to the Deputy Scientific Integrity Officials be recognized and participate in drafted scientific guidance. Make sure that the guidance does not just represent (b) (6) best practices. (b) (6) (b) (6) [redacted] Much of the guidance written by the SIO is very (b) (6). I think the subcommittees should be voluntary and advertised on Talent Hub so that scientists can be chosen perhaps with less bias than I have seen in the past. What I am saying is that the subcommittees would be managed by different DSIOs from across the Agency and contain scientists from all organizations.

427 "Scientific Integrity" has become politicized. EPA employees typically fall to one side of the political spectrum. If someone has a perspective, based on data, that does not fit into the narrative of the preferred politics, it is not heard or respected. To disagree with the narrative may brand someone unfairly. Data analysis should not be driven by political interests, or by political narratives.